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DPMA Show Will Accent Management

By Thomas J. Morton
CW Midwest Bureau

HOUSTON — The 1971 edition of DPMA's International Data Processing Conference and Business Exposition opens here next week and according to DPMA, the emphasis is on management, in the computer room and out of it.

The seminars, DPMA said, "will explore ways to improve management efficiency in the areas of employee communications, computer installations, cost control, systems function and design, programming, operations planning and equipment control."

Under the "streamlined seminar format," instead of the traditional two-and-one-half-hour sessions, a new one-hour session will be the rule.

A seminar now can be completed in a half day instead of a day-and-a-half. Also, DPMA noted, the seminars are each scheduled twice during the conference, to allow people to attend sessions without conflicts.

A 10-series seminar program is also scheduled, with eight "open" or general interest seminars also available. The general interest seminars will also last one hour.

For the first time in its 20-year history, DPMA will offer a program to non-EDP people. A full-day seminar for top corporate executives responsible for the DP activities of their companies is scheduled for Tuesday, June 22, the conference's opening day.

This seminar has been described by DPMA as a "session [that] gets at the heart of the problem currently baffling top corporate management in all industries — how to get your money's worth out of the computer; how to relate computer expenditures to computer re-

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Early Detection

Dr. Richard E. Wainerdi and Dr. Lloyd E. Fite study fingernail samples as they are exposed to radioactivity in specially designed chambers at Texas A&M's Activation Analysis Research Laboratory. The procedure, involving neutron activation analysis and a 360/65, spots cystic fibrosis in newborn infants through detection of higher trace levels of copper. The disease is disabling and eventually fatal, but early detection and treatment can add many years to a youngster's life.

Cmdr. Hopper Tells Users

'Dinosaur Systems Have to Go'

By Phyllis Huggins
CW West Coast Bureau

HAWTHORNE, Calif. — "Dinosaurs in the computer industry have got to go," said Cmdr. Grace Murray Hopper, as she renewed her battle against what she calls mammoth computer systems, operating systems, management data bases and massive mathematical problems.

"You do not know how much economy you have lost to overhead by having an operating system and on top of that a management system. It is terrible and it must be eliminated," she said at a recent joint meeting of Los Angeles ACM and DPMA members.

"Operating systems can be eliminated by having modular minicomputers handling delegated sections of programs. You don't have to control the handling of huge systems.

"Management data systems treat everything as a reporting file. They file everything.

"Management doesn't need that for its reports. They only want specialized information.

"This dinosaur could be eliminated by having a reporting file somewhere, but then delegating to minicomputers the specialized information for specialized reports," Cmdr. Hopper stressed. "Management has always delegated authority. But in computer systems we think we should record every piece of information available anywhere and wade through it all for every report request."

Cmdr. Hopper maintained the wave of the future is minicomputer systems linked together... "Detroit has an assembly line. Why should massive math-

ematical problems be handled in one huge system when they could be broken up and 'assembly-line processed' in minicomputers.

"You can't efficiently manage a massive data processing project. It must be broken up. Then it can be managed."

Members of the audience were divided among large-scale "number crunchers" who wanted bigger and bigger computers, and business users who approved of her modular approach to controlling the development and effectiveness of computer usage.

Cmdr. Hopper also sees minis getting down to the "price of \$500 or \$600. These are the sensible components of computer processing."

Regarding her work after recall to the U.S. Navy to develop standardization of languages, Cmdr. Hopper was appreciative of the help she received from manufacturers and users. "We had no money, we needed their help and they gave it." Because of the effort, there are now 12 manufacturers' Cobol compilers that meet Navy specifications.

From her past work on Cobol standardization, Cmdr. Hopper emphasized "standardization can work."

Putting in a strong plea for standardization, she said: "People can use it, it doesn't hurt anyone, but lack of standardization does hurt." As an example she pointed out the problem of labeling tapes and

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Nader Study Demands Trust-Busting Agency

By Alan Drattell

CW Washington Bureau

WASHINGTON, D.C. — Computer users may soon find a tighter, more authoritarian antitrust enforcement by the Federal Government in the DP industry if the recommendations of a Ralph Nader-sponsored study group are followed.

The group's 1,148-page report, the result of a year-long study, was described by Nader as "A Report on Crime in the Suites."

It also details some previously unknown information about the current antitrust suit filed by Justice in January 1969 against IBM and the alleged decision not to sue Honeywell and GE following their merger announced

13 months ago.

The primary goal of the report concerns the breaking up of monopolies and "shared monopolies," also called oligopolies. This despite the group's disclosure that 83% of all civil suits filed by the Antitrust Division of Justice in the past 10 years have ended in consent decrees.

The report calls for the formation of a new Competition Protection Agency which would consolidate the antitrust activities of Justice and the Federal Trade Commission.

Among other things, the new agency would seek to break up "existing oligopolistic industries so that no industry would have four firms producing more than 50% or eight firms more than 70% of the relevant market."

Among the targets would be the computer business, dominated by IBM and its reputed more than 70% share.

IBM Suit

Impetus for filing the suit against IBM, according to the Nader people, came from a staff leak within the Antitrust Division at Justice. A spokesman for the Justice Department, however, told CW that the agency had no comment on this allegation.

The IBM filing "was a case which (Donald) Turner (an assistant attorney general) had reservations about and which (former) Attorney General Nicholas DeB. Katzenbach thought should not have been brought because of insufficient evidence," the report states.

In a statement to CW, Katzenbach said: "I left the Justice

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Bell Delays Users' Line Changes

By Ronald A. Frank
CW Technical News Editor

WASHINGTON, D.C. — Objections by data users to AT&T's proposed Connecting Arrangements (CA) for voice-grade private lines have apparently forced the carrier to modify the changes.

A new tariff proposal with less stringent protective requirements will be filed this month with the Federal Communications Commission, effective July 15, unless the FCC suspends the plan pending hearings.

At issue is the AT&T proposal to require CAs on private lines connected to non-carrier data equipment. The proposal, postponed several times by AT&T, would have taken effect on July 1 [CW, May 19, June 2]. AT&T said it had already begun installing the CA modifications on a selected basis.

It was not clear what action, if any, AT&T would take to remove the CA modifications at sites where such installations have already been made. Presumably no action will be taken until the expected modifications have been considered by the FCC.

In a letter to the FCC, AT&T said: "It is planned to file new regulations which will provide that necessary protective arrangements will be included in the service terminal furnished by the telephone company."

The exact effect of the proposed changes on private line users is not clear. The AT&T reference to "service terminal" apparently is the private line equivalent of a local loop, in addition to any conditioning and physical connection points normally provided with interstate voice-grade private lines.

Users have objected to protective arrangements on voice-grade private lines asserting that AT&T had permitted virtually unrestricted use of customer-provided devices on these facilities for more than 10 years.

Some observers feel that AT&T is now insisting on the private line protection to justify the need for DAA units on the dial-up network.

An acceptable method for interconnecting non-carrier equipment is still under study by the FCC.

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Municipal 'Searching Party' Finds Untaxed Machines

By Edward J. Bride
CW Staff Writer

KANSAS CITY, Mo. — The Jackson County tax assessor led a "searching party" of a dozen reporters and photographers through a tape library to find a computer which he claimed had not been listed on a user's plant equipment form.

Finding the "missing" six-year-old Honeywell H-200, John Sweeney said this would add \$2,800 to the county's tax revenue. The estimate is based on a full assessment, without any percentage allowed for software or services which might have been included in the used purchase price of the computer.

\$9 Million of Equipment

The action was part of a local campaign to uncover and put on the tax rolls all data processing equipment previously unreported. The location of equipment worth \$9 million, which would be assessed at about \$3 million, is expected to net over \$200,000 in taxes, according to assistant assessor George Lenhart.

The user in question refused to let the "searching party" of

county officials inspect his center the first time, but when Sweeney sent a deputy for a court order, the user's attorneys advised him to relent and permit the search.

Sweeney assessed the machine at its full purchase price (used) of \$155,000, which was paid by Information Systems Services in April 1970.

Charles E. Frasier, president of Information Systems Development, Inc., parent company of ISS, said he planned to fight the full assessment, since county law provides for the assessments to be made as of the first of each year.

He said he would claim additional depreciation and "spare parts" reduced the taxable value to \$90,000, as of Jan. 1, 1971.

He would not question the inclusion of any software in the value of the computer, Frasier noted, since he was already a user of H-200 gear and had the appropriate system and application programs.

Parade Through Center

Frasier was critical of Sweeney for conducting the parade of reporters through stacks of mag-

netic tape and punch cards to his office, fearing the possibility of damage or loss of records.

While there was no such damage, he noted the possibility "was a concern to me at the time," and called the search a "bad move, in bad taste."

Frasier said he had not been able to schedule a tax equalization board hearing yet, but was hoping the assessment could be settled without taking the matter to court. The computer's new price, six years ago, was

around \$454,000, Frasier added.

The formula used here taxes equipment at \$70 per thousand, up to 30% of assessed value the year after the acquisition.

The tax value diminishes 2% a year for five years, after which a user pays taxes on 20% of the original assessed value.

Many Unclaimed CRTs

The searches have uncovered many unclaimed items, such as keypunch machines and CRT terminals, at installations which

had claimed only the value of the CPU, Lenhart noted.

Normal procedure is for a business to file a special form listing plant equipment and its value.

The question of software had never been argued by a user, possibly because the taxation is based on only a fraction of the assessed value, Lenhart said.

Furthermore, he noted, rented equipment taxation is based on one-third of 40 months' rent, while amortization is normally 48 to 52 months.

Ecology-Minded Company Determines To Eliminate Computer Pollution in UK

CW European Bureau

LONDON — The Age of Ecology has left its mark on the DP industry and computer pollution may have met its match.

A company here promises not to sell second hand computers but will turn them into scrap in a "computer junkyard." Computer Disposals Ltd. guarantees it will "wreck computers — deliberately."

Richard Williams, director of

the firm, said: "One thing is certain, we are not going into the second hand computer business, but when the need clearly exists for spare parts — which are now unobtainable elsewhere — it would be wrong not to meet the demand."

A building in Berkhamsted, Herts, is being converted into a computer wrecking shop and part of the building will be used as an environmentally controlled store for parts which have a potential further use, while another part will be used to reduce the remaining major parts to scrap level.

Some machines, including Ferranti Pegasus and an ICL 1202, have already been junked; others, such as a Bull Gamma 10, are being held for spares. Whether the owner of the machines will have to pay to have

the machine removed, or will be paid for the machine, will depend on the model and the likelihood of any of it being resold.

"In some cases," Williams said, "it might not be viable for the owners to even pay to have the machine removed, as it has in effect become a structural part of the building containing it."

Williams estimated that within five years in the UK some 5,000 machines will be obsolete and ready for the junk heap. Estimates by IDC Europa Ltd on the basis of the International Data Corp. International Installation File for Britain place the number of machines in this class in the UK at about two hundred to three hundred. Many of these would be junked by the original suppliers because of up-grading.

End the 'Dinosaurs,' Cmdr. Hopper Says

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disks.

"There is no standardization for this. In one Navy installation there are 4,000 reels of tape and no one knows what's in them."

"But because they are government property and can't be destroyed they are still there."

She also pointed out the glaring error of not keeping an inventory of programs. "Nowhere in the Department of Defense or in government is there an inventory of programs. No one knows what there is that is already done."

"This is a young industry," she said, "we haven't even gotten into the jet phase of computers yet. Change is very rapid. We went from computations per second, to milliseconds, to microseconds and now to nanoseconds."

"If you look at the time scale of these changes, they are shortening. Now in dark corners or laboratories they are talking about picoseconds. Change is going to continue to be more rapid."

"And yet I hear people in the industry saying, 'But we have

always done it this way.' 'Always' means two-and-one-half to three years."

"If I hear any of you saying, 'But we have always done it this way' I will come and haunt you for 24 hours."

Stronger Antitrust Enforcement Urged

(Continued from Page 1)

Department Oct. 1, 1966, and the IBM suit was not filed until Jan. 17, 1969. Furthermore, as Justice Department records will confirm, during the time I was in the department, I never had any knowledge of nor any connection with any proposed investigation or legal action involving IBM." Katzenbach joined IBM, where he is general counsel, two weeks after the suit was filed — on Jan. 31, 1969.

The study group concludes that "it is doubtful" that the suit against IBM will lead to a new law being enacted, although "the potential economic impact of the IBM case is mammoth."

The report continues that "our supposedly competitive economy has been disfigured by monopoly and oligopoly... overall industrial concentration has been rapidly increasing, until the top 200 industrial corporations own two-thirds of the total assets."

This concentration leads to "corporate socialism" and results in "price-fixing, parallel pricing, mergers, product differentiation and advertising, tariffs, quotas, subsidies and preferential tax treatment."

The report points an accusing finger at current Assistant Attorney General Richard W. McLaren, singling out his alleged "disinterest in striking out at existing oligopolies."

"Some of McLaren's imperfect record arises from cases not filed

or pursued... Honeywell, number three in the (computer) industry, was allowed to acquire GE's computer hardware division, number five.

"The combined annual revenues of \$351 million and \$412 million, respectively, make it the number two company worldwide, with 10% of the market."

"Although still far behind IBM's 70% monopoly, the approximately 5% share of the market for each falls within the restrictions of the guidelines for concentrated industries, guidelines which McLaren has stated he would observe."

"It has never been accepted as

sensible antitrust policy to permit two firms to merge in order to countervail the power of an existing monopolist; if so, all industries would logically devolve into duopolies. The fewer the number of firms, the easier collective action."

The study group sees possible future alliances between Honeywell and GE in software, defense contracting and domestic automatic control devices.

"The [Antitrust] Division," states the report on the marriage blessed by Justice "allowed the merger by the Justice Department's secret business clearance procedure."

Nader Group to Consider Ways To Improve Data Flow to Consumer

WASHINGTON, D.C. — Ralph Nader's public interest research group will sponsor a conference here June 19 to discuss how computer technology can help give consumers data on making informed purchasing decisions. The public meeting will be held in the district building and start at 9:30 a.m.

"The ability of the consumer to obtain the information necessary to make a rational, informed choice in today's marketplace," said Nader, who will keynote the day-long meeting, "has been rapidly diminished by the growing complexity and impersonal nature of the market."

In his keynote address, Nader

will emphasize the critical need for an improved flow of information to the consumer.

T.D.C. Kuch, coordinator of a volunteer group of computer professionals assisting Nader's research group, will describe a detailed proposal for a national system to provide information on competing products and services to consumers.

Rep. Benjamin Rosenthal (D-N.Y.) will talk about consumer information responsibilities of the Federal Government. Other speakers will include Paul Notari of the Association of Computer Programmers and Analysts and Dr. Carl Hammer of Univac.

DPMA '71 to Stress Management

(Continued from Page 1)

turns; how to control costs and expenditures."

The keynote speaker, John L. Jones, vice-president, management information services, Southern Railway System, will discuss the improvement of the vital communications link between the computer operations staff and top management. The

DP Aids Design Search For Faster Race Tire

INDIANAPOLIS, Ind. — With the aid of a computer and plotter, Firestone has designed a tire for racing that embodies several changes. The new front wheel tire has a horizontal tread design, and lower profile.

Data acquired in miles of testing was used as input to the computer, which accepted the desired tire description, analyzed the data, and then calculated thousands of parts necessary to draw the full design.

The Computer Optimizer, developed by the company's research division, can formulate a product with up to five varying chemical ingredients and eight physical properties.

keynote address will be given during the conference's general assembly on Wednesday morning, June 23, in Jesse H. Jones Hall of the Albert Thomas Convention and Exhibition Center, a part of the civic center complex of downtown Houston.

A business exposition is scheduled to open Tuesday, June 22, at 1 p.m. Over 60 exhibitors are planning to have booths at the 1971 show, DPMA said. Included in DPMA's list of those companies coming to Houston are: Litton Industries, NCR, 3M Co., AT&T, Cummins Chicago, GT&E, Univac and IBM.

DP installation tours include Humble Oil, Houston Power and Light and Armco Steel. A trip to the Nasa Manned Space Center is also scheduled.

The ladies program includes a trip to the Gulf resort city of Galveston and a visit to one of Houston's most modern shopping centers, the Galleria.

Conference registration opens at the Albert Thomas Center, Sunday, June 20. The conference welcoming reception is Tuesday at 8 p.m., and the conference banquet is Thursday, June 24, at 7:30 p.m.

But Doctors Make Final Analysis

Early Diagnosis Is One Benefit of Multiphasic Testing

By Edward J. Bride
CW Staff Writer

GAINESVILLE, Fla. — Financial savings for patients and hospitals, plus increased detection of diseases give special meaning to the term "multiphasic examination," especially for the thousands of people who have undergone this type of testing.

Every geographic area seems to claim a pioneer in this area of medical progress through computers. (Those boasting multiphasic centers "emulated" in other areas include New York and Florida, as well as the San Francisco metropolitan area, and the specialized equipment is in use throughout the country.)

Dr. Morris F. Collen, of Oakland's Kaiser-Permanente Medical Program, has been working in the area of computerized health tests for about 20 years, and under his direction some 250,000 patients have undergone multiphasic examination.

The term means about what it sounds like: an elaborate system of testing, analyzing, recording history, and of diagnosis based on "multiphasic" input.

Multiphasic patients normally are not in emergency situations but may be being "bulk processed" for group insurance programs.

Doctors Diagnose

In the northern Florida area, the system frees doctors from administering health tests, enabling them to spend more time on diagnosis and treatment. Patients are referred to the J. Hillis Miller Center here by private physicians.

Before going to the center, each patient mails in a medical history questionnaire and the data is entered into an IBM 1800 data acquisition and control system. The computer then schedules an exam.

A plastic card, much like a credit card, is given to the patient, who uses it for identification at each testing station.

To test blood pressure, for example, a pneumatic belt with an attached microphone is placed on the patient's arm. The computer signals the device to inflate and deflate and the microphone picks up the sound of the patient's pulse when the blood begins to flow again through the arteries.

As a precaution, the computer compares this data against the accepted norm for the person's age and sex. If the data determined by the test shows an extreme difference, the computer signals to repeat the test three more times, just to be sure.

When each phase is completed, the data is automatically entered into memory. When the test is complete, the computer signals the receptionist (through a teletypewriter terminal) that the patient is cleared for release.

Over 50 physicians have already made use of the facility, which can handle 40,000 to 50,000 patients a year.

Earlier this year, it was estimated that there were 10 multiphasic centers in the U.S. The Gainesville center claims to be the only one "on-line," that is, with the bulk of its testing equipment tied directly to the computer.

The program here was developed by members of the Alachua County Medical Society and doctors and faculty at the University of Florida, under grants from the Florida Regional Medical Program and

the Veterans' Administration.

In the North, the Health Insurance Plan of Greater New York operates a "bilingual" center, with the computer's video terminals "speaking" both Spanish and English. The HIP system is modeled somewhat after the Kaiser-Permanente center, according to officials at the New York site.

The center is currently open only to insurance plan members and to new adult enrollees, but will apparently expand when the center participates in a federal research project to assess the effectiveness of the preventive approach to medicine.

All the centers are established on the principle of effective utilization of expensive machinery: maximizing equipment through a steady flow of patients.

Doctors at the Good Samaritan Hospital in Cincinnati also praise the results of

multiphasic testing, pointing out the final analyses are always made by the doctors. The computer's assistance in diagnosis is

Portable Unit Used

HATO REY, P.R. — A portable multiphasic testing unit is in use here. Introduced by Computa-Lab, Inc., the units are leased to physicians, hospitals and other medical facilities.

With the portable units, one nurse or technician can conduct comprehensive tests at the rate of four patients per hour.

The unit is capable of testing up to 15,000 patients per year.

great, through the efficient handling of information, but the actual step of determining whether a disease or disability exists is too important to leave to a

machine, one doctor recently said.

The values of this testing have been proven statistically, according to one of the pioneers. Collen, of the Kaiser-Permanente center, said people who take multiphasic tests have fewer illnesses, fewer days absent from work, fewer "chronic" conditions, and also show fewer early retirements because of disabilities.

In a report to the California Medical Association, Collen said computerized testing can be done for one-third the cost of tests done in a doctor's office or analyses performed in clinical laboratories.

Collen, like the other proponents, said one of the chief benefits of multiphasic testing is the ability to pick up early symptoms, allowing for early treatment of illnesses.

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FACT 2

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FACT 3

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FACT 4

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FACT 5

EVALUATING

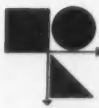
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FACT 6

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Moonlighters Get Data Bank

SANTA MONICA, Calif. — Getting a second job, or moonlighting, no longer need be a haphazard operation. A firm has been set up to serve employers and workers for the second job market. For \$10, an applicant or employer puts his request on file with Moonlighters, Inc., which uses a computerized job bank and referral system to match prospective employers with workers.

DP Sameness Is a Way of Life in Tahiti

By Bohdan O. Szuprowicz

Special to Computerworld

PAPEETE, Tahiti — There are four computer installations here in Tahiti. All the installations consist of IBM 360/20 systems and all are serviced by Monsieur Yodo, the only customer engineer, better known locally as "Monsieur IBM."

A fifth system will soon be installed by Electricite de Tahiti and — you guessed it — it's going to be another IBM 360/20. This monopolistic monotony is not due to the lack of awareness of the users to other and perhaps more suitable alternatives. Rather it is accepted as a necessity for continued operation.

Because the market is very small and the island very remote, it is not possible to keep a larger supporting organization nor does it pay to bring in experts from other places.

By choosing the same system, the users on the island protect themselves against extended downtime in any installation. When one system is down and Monsieur IBM is fixing it, and another system goes down, there are still two more to take up the load of the others during second and third shifts.

On the average, service is available within a few hours unless one has the bad luck of going down when Yodo is already fixing another system. More serious problems can develop when replacement parts are needed,

however, because none are stocked on the island. This type of failure can keep a system down for a week or two while the parts are flown in from France.

It is then that close and friendly relations with other computer installations really pay off.

Three of the four installations are card systems and this causes many errors during the input stages of many operations. The card systems apparently were not designed to operate in the tropics where 90% humidity prevails all the time and expensive air conditioning systems are necessary. Electromechanical failures due to hot, humid conditions are also more common here, but most can be handled by Yodo when he is available.

Actually, Tahiti would probably remain computerless to this day if it were not for the French Atomic Energy Commission. In 1965 the Centre d'Experimentation du Pacifique was established and in 1968 CEP brought its IBM 360/20 to process data

locally and the atmospheric atom tests got under way. This first system was the only tape system and CEP offered excess capacity to the rest of the community.

It also forced IBM to import support staff and train the first batch of operators and programmers locally. During 1969 the other three systems were installed at Socredo, a government-owned bank; at Cida, an import-export merchant house; and at Banque de l'Indochine, a private bank.

"It was a question of bringing in and training the technicians and also the people who were going to use the systems," said Monsieur Laperroux, Tahiti's only systems consultant, enjoying a monopoly of his own.

He came on a contract with CEP at the installation of the first computer and after six months decided to stay as an independent consultant. He was later instrumental in establishing all the other computer installations.

Communications Featured At Armed Forces Show

CW Washington Bureau

WASHINGTON, D.C. — Computers and communications were spotlighted here last week at the 25th Annual Convention and Exhibition of the Armed Forces Communications and Electronics Association held at the Sheraton-Park Hotel.

Although final figures were not available, Afcea expected about 7,000 representatives from industry, science, research and educational institutions and the military to hear the technical presentations and view military and industry exhibits.

A total of 111 exhibitors occupied 235 booths.

A number of new products highlighted the show. Control Data Corp., for example, demonstrated a prototype of its TPR OCR unit. A fairly slow machine that has a reading rate of 100 char/sec and reads only Ansi OCR-A-1 alphanumeric font, it will eventually be available to the commercial market, a CDC representative said. Currently in the laboratory, the machine is expected to sell for about \$25,000 when released, he added.

Western Union demonstrated an extension of the Autodin electronic data communications network. Its Mate system (Multi-terminal Access and Transfer Equipment) provides base-level message distribution and communications centers with the same degree of automation available at the main Autodin switching centers.

Using a Digital Equipment Corp. minicomputer on the base, the Mate system automatically handles local message traffic between Autodin and up to 40 various terminals.

Communications Technology Inc., a subsidiary of Computest Corp., Cherry Hills, N.J., introduced a data communications distortion analyzer for firms maintaining or servicing data communications.

And Alden Electronic & Impulse Recording Equipment Co. introduced several facsimile systems. One, a Fax order dispatch system, the Alden 600, is designed to transmit service orders up to six inches wide by any length over regular telephone lines.

News Wrapup

NAS Board 'Not Needed'—Grosch

WASHINGTON, D.C. — The three-year-old Computer Science and Engineering Board of the National Academy of Sciences has come under fire from Herbert R.J. Grosch, a senior research fellow at the National Bureau of Standards.

In a letter addressed to the 19 newcomers to the board, Grosch writes: "You are not needed and you are not wanted."

Grosch tells them that the board "is self-created. It was not established by NAS in response to an obvious national need . . . Second, it was self-serving."

In his letter Grosch charges that "observers were barred from (some of) the panel meetings" of the board and two projects considered "trod all over the NBS Center for Computer Sciences and Technology."

A spokesman for the National Academy, which is chartered by Congress, said in reaction to the barring of observers: "That's an academic point, since we don't ordinarily appoint government people to committees that evaluate work or recommend policies to government agencies."

Outside Firm Hired to Forecast N.J. Pollution

EAST RUTHERFORD, N.J. — State and federal agencies have hired an out-of-state consultant to devise computerized methods of forecasting air pollution in the Hackensack meadowlands, the future site of a massive sports complex.

The \$110,000 contract for the study went to Environmental Research & Technology Inc. of Waltham, Mass. The federal Air Pollution and Control Office will fund \$100,000 of the total cost and \$10,000 will come from the Department of Environmental Protection.

The idea is to be able to predict what the 1990 air pollution picture will be for the meadowlands depending on the planned developments for the area.

'Big Allis' Back in Service in Manhattan

NEW YORK — That sigh of relief was from the computer users of Manhattan, whose power situation was improved with the restoration of Big Allis, a million-kilowatt electric generator which had been out of service since last July.

The generator, nicknamed "Big Allis" after its manufacturer, Allis-Chalmers, is located at Consolidated Edison's Ravenswood plant in Queens.

Canada Plans System to Check Cargo Imports

WINDSOR, Ontario — The Treasury Board will be asked "possibly within the next month or two" to approve the use of a national computer system to check cargo coming into Canada from foreign countries.

According to Herb Gray, minister of national revenue, Canada's customs and excise department will have a fully computerized system to check and process cargo by 1974.

How About Taking a Few Days Off...to Work?

CLEVELAND — How about taking a few days off to work?

This thought must be on the minds of some of the employees of the Cleveland Data Center at Greyhound Computer Corp.'s Data Services Division.

It seems some lucky workers, under an unusual work week plan, get five consecutive days off every three weeks.

The plan involves 10-hour work days for the center's employees in computer operations and eight workers in programming and systems analysis.

For the DP workers, the plan works in three-week cycles with two days on, two off, two on, one off, four days on, five off, four on and one off.

Those in programming and systems analysis work a two-week cycle with four days on, four off, four on and two off.

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Bank Banks on Short Week

NEW YORK — Computer users in the insurance sector were the first to adopt a three-day week for their DP departments, and now banks are following.

The first is Manufacturers' Hanover Trust Co.

The 175 computer operators at the bank are expected to go on the new schedule this month. As occurred with the two insurance companies previously reported in *Computerworld*, the new system is being implemented directly from a five-day week, without an interim four-day system.

While some hiring will have to be done, the elimination of most of the Saturday overtime will more than offset any additional costs.

Work shifts will now be 12-1/2 hours a day, with a 45-minute lunch break and two 20-minute coffee breaks. There will be two shifts, and the "work week" will run Monday through Wednesday, or Thursday through Saturday.

DP Recycling Effort Aids Conservation

By Phyllis Huggins

CW West Coast Bureau

SUNNYVALE, Calif. — Volunteers at Control Data Corp. have begun a recycling paper program whose resulting profits are donated to a conservation group to buy and preserve redwood lands in Santa Clara County.

Six man hours a night are required to move the scrap paper from the buildings to the parking lot where they are picked up. Approximately one ton of computer printout paper and 500 pounds of punched cards are salvaged each night.

Jeff Hobson and Chuck Untulis organized the program and about 25 people are in the rotation.

Over \$9,000 Raised

Recipient of the profits is the Sequoia Sempervireans, non-profit arm of the Sierra Club. Over \$9,000 has been raised in the past six months. The biggest problem is coordinating the effort to get the paper to the pickup point.

Also in Sunnyvale, Timothy Ames at Lockheed Missiles and Space Co. initiated a similar pro-

gram administered by the company. The profits go to Lockheed. The group is reclaiming seven to eight tons of computer paper a week, estimated as one-half of its total computer paper use. The rest of the paper, Ames explained, has to be shredded and destroyed according to government regulations because it is classified information. The program to salvage paper cards has not yet been worked out.

Lockheed encourages people to salvage the paper and the waste company provides the bins for the scrap and picks it up.

Now WORKTEN
running on IBM 370



Duke University

"3 days of WORK TEN coding equals 2 weeks of COBOL coding"

Larry vanGoethem, Director of Administrative Data Processing, Duke University

"During the evaluation period, we programmed WORK TEN head-to-head with COBOL. The assigned project took 45 days in COBOL. We did the same project in WORK TEN in 2 weeks.

"Since that time, we have had a great deal of experience with WORK TEN. In most instances, 2 or 3 days of coding in WORK TEN is equal to 2 weeks of coding in COBOL. This includes actual coding, thinking, head-scratching and all the other time-consuming processes. It's a big time-saver in documentation, too. For example, prior to WORK TEN, our programmers spent 20% of their time on documentation. Now they spend 5% or less.

"The most critical project we have attacked was a major system conversion to third generation programs and equipment. We estimated five man years of coding in COBOL. It was obvious we could not write that much



code and meet our deadlines. We purchased WORK TEN, used it for 34 of the 38 programs, and finished in three man years including WORK TEN training. The WORK TEN portion went smoothly. The only logic problems encountered were in the four programs written in COBOL.

"We particularly like the sub-programming logic and the opportunity to create modular programs. We use this facility frequently to break down major projects into simple elements that can be treated as stand-alone programs. This gives us better personnel utilization and puts the projects up and running far faster. We use WORK TEN intensively and find it can do it all. It has the flexibility to handle simple one-time reports as well as sophisticated, complex programs.

"Without WORK TEN we would have 15 people on our staff. With WORK TEN, we do the job with 10 people."

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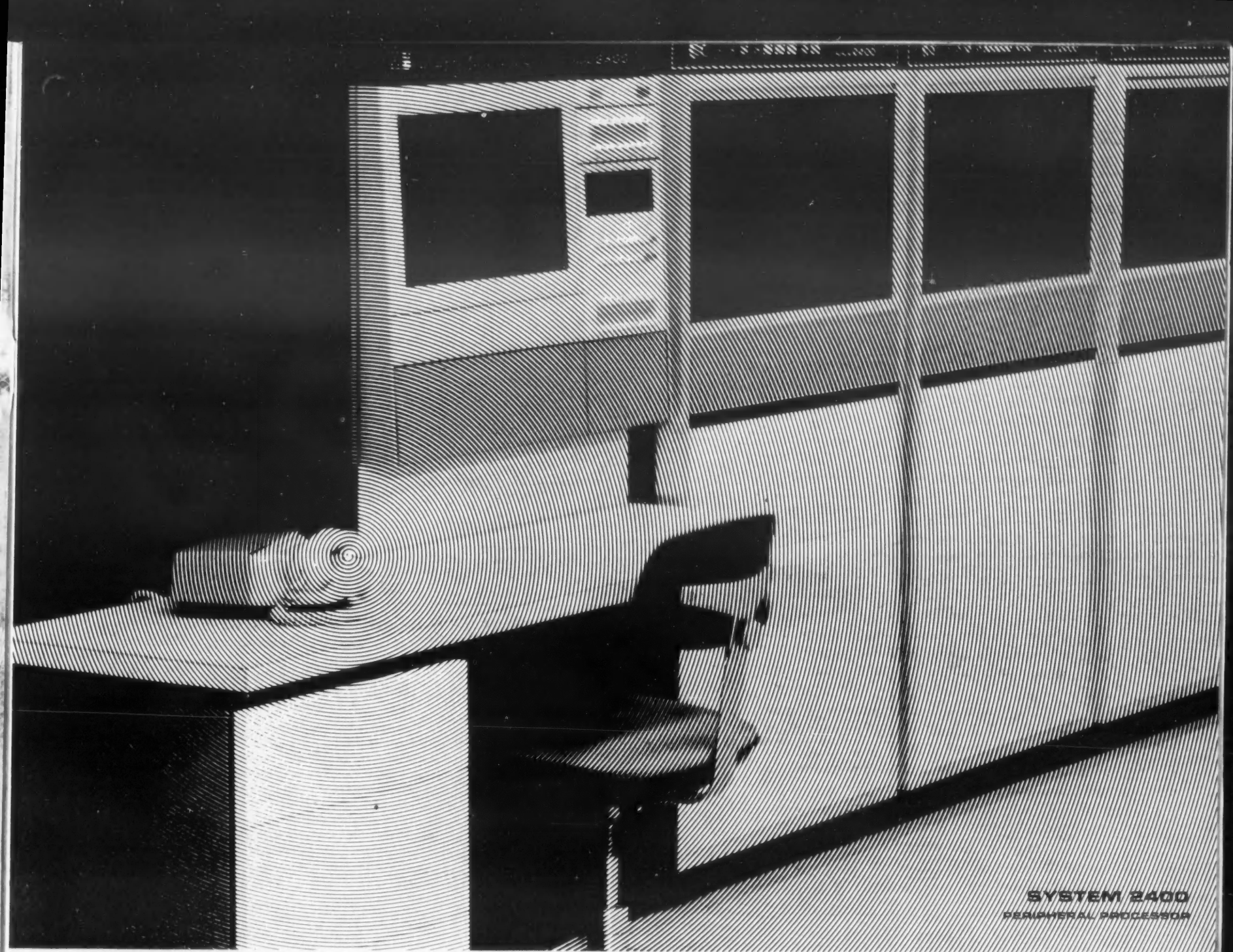
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Mohawk Data Sciences Corp.
Herkimer, New York

Editorial

New Choice, New Problem

Users soon will be able to choose from among data transmission facilities offered by the newly approved specialized carriers as well as from among those offered by the existing common carriers.

Such a choice, with few exceptions, has never before been available.

But before we savor the prospect of competing carrier salesmen beating a path to our data door, a word of caution is in order.

The new carriers realize that their performance and service will at first be on trial. They know they will have to build a reputation for dependability.

But open competition carries with it the very real possibility that all of the present applicants may not survive the pressures of the marketplace. The FCC decision touched on this question.

It said in part, "We do not perceive any significant adverse consequences to the public in the event that one or more of the [specialized carrier] entrants should fail. Any remaining customers could transfer to another carrier at what appears to be minimal inconvenience, and such carrier would be required to permit continued use of customer terminal equipment unless there is a risk of network harm."

A user who suddenly finds himself without the services of his specialized carrier will be more than minimally inconvenienced.

The user expends a great deal of time and money configuring a data network. If parts of that network go down, the results could be disastrous for those who fail to plan ahead.

While we urge users to consider the services of the new carriers, careful planning to provide backup service should get top priority.

Credibility Gap Widens

WASHINGTON, D.C. — The credibility gap created by the Nixon Administration seems to be widening.

There have been the historic statements regarding our incursion into Cambodia more than a year ago, figures on the state of the national economy, and now a recent utterance by Herb Klein, the White House communications director.

Klein, in a talk before a large audience of computer professionals at last month's Spring Joint Computer Conference, said specifically: "... Because the Federal Government uses computers, the question has been... (asked) whether the government is using computers to keep information on American citizens.

"The answer, of course, is yes. The government uses computers to store our social security records... in the Medicare program... by Internal Revenue Service...

"But the central question... is obviously not the benign use of computer files by the U.S. Government, but the potential misuse of information gathered on each of us. Put more bluntly, is the government in possession of

secret dossiers which, if released, would violate our cherished right to privacy, or as Mr. Justice Brandeis referred to it, the right to be left alone?

"The answer is no."

Obviously, Herb Klein was unfamiliar with the findings of the Senate Subcommittee on Constitutional Rights chaired by Sen. Sam J. Ervin Jr. (D-N.C.).

"If the attitude of the present administration is any indication," Ervin said, "government will make increasing use of computer technology in pursuit of its current claim to an inherent power to investigate lawful activities and to label people on the basis of their thoughts."

There are those who claim that if an individual has nothing to hide he should not be opposed to the surveillance activities of the military or the Department of Justice and he should be willing to answer all questions put to him by his government — including a question asked individuals seeking government jobs: Is your sex life satisfactory?

What these advocates of surveillance and disclosure forget is that the minions collecting the data and the computers storing it might somewhere along the way make a grievous error. The result could be destruction of an individual's reputation and/or livelihood.

We have seen what the credibility gap did to Lyndon Johnson. It could well be that Mr. Nixon will be the second victim in a row of false words in the face of real deeds.



'Two Blocks Down the Street—Ace Employment Agency'

Letters to the Editor

Reader Has a Solution To the Credit Card Blues

After reading your May 26 editorial on credit card vulnerability to fraud, I am delighted to report that the capabilities you mentioned are presently available in the Burroughs Series RT2000 Remote Cash Dispensing Machine and the TU300 Credit Card Authorization terminal.

The Magnetic Stripe is read and validated and any of the criteria in your editorial can be programmatically handled.

Jerome C. Daigle

Burroughs Corp.
New Orleans, La.

DP Contracting Requires Interdisciplinary Effort

Arnold B. Schacknow's comments on the role of lawyers in minimizing contract frictions in the computer area [CW, May 26] reveal a serious misunderstanding of the contributions qualified legal professionals are making in that area.

Contracts written by lawyers certainly do not "only determine who will eventually win the lawsuit in the case of a breach of contract." To the contrary, well-designed contracts, which inevitably merely reflect well-designed negotiations, are means for identifying effectively the mutual rights and obligations of the parties, including particularly a definition of the scope of work involved.

Those negotiations and contracts are designed primarily to avoid breaches and resulting lawsuits since neither party ever wins in litigation. It always has been my principle to regard the written contract essentially as performing the functions for people administering the contract on both sides that a software program performs for computer equipment.

It provides the instructions for resolving possible misunderstandings and disputes and for achieving smooth performance of the respective obligations.

As a matter of fact satisfying opportunities for interdisciplinary involvement between computer specialists and lawyers are present in the contracting area.

Roy N. Freed

Boston, Mass.

Where Was Management When It Was Needed?

In The Taylor Report, April 28, it appears that Taylor feels the operator should catch and/or prevent all the errors of the DP department. Certainly a good operator is a great asset to a DP team; however, in most installations he is just one link of the chain. True, the operator should inspect the first page of a report and occasionally

thereafter, and report problems encountered, but where was management in these cases?

Why didn't the programmer or systems analyst who checked the test run detect the bad heading? It should never have been released to operations!

Why would any company attempt to operate with poor quality supplies? Certainly the manager or supervisor had to be aware of the inferior product if Taylor was able to detect it by one short observation.

Any supplier can have one bad box and will be happy to replace it. If that was the case, the operator should have taken another box and made the notation; however, the report sounds as if all of the paper was about equal. I would also guess that the operator had reported it either verbally or by the log sheet so that management was aware of it, and the next shipment would be different or his efforts were fruitless.

I certainly encourage every manager or purchasing agent to buy good quality products. They cost you very little more to buy and save money in the end by eliminating equipment problems, re-runs, poor moral, etc.

Robert Warolin, DP Manager

Maple Island, Inc.
Minneapolis, Minn.

96-Column Cards - Any Future?

For someone who has been in the DP business long enough to remember the battle between the Big Brother and the manufacturer of 90-column card equipment, it is very amusing to read the article "Users to Benefit When New Card Size Is Adopted" [CW, Feb. 24].

Remember how the Remington Rand 90-column card offered all the advantages of an extra 10 columns, round holes instead of square holes, metal-to-metal positive contact when reading, etc. However, Big Brother won that battle — and the 80-column card is now an industry standard.

Now that Remington Rand (or Univac, as they are now called) will no longer support its 90-column round-hole card, IBM is committing its System/3 users to non-standard 96-column cards. And I gather that when the worried customer asks, "What will I do if I want to move to a 360 later?" — he is advised to just use the first 80 columns...

I am really looking forward to the next generation of card equipment, which I hope will be able to handle the 132-column card, so that the present 80-80 list becomes a 132-column card-to-print (i.e. a full print-line from just one card!!!) Oh well, joking aside, in my opinion the future holds greater promise for the keyboard-to-cassette or direct on-line entry device than for the new non-standard 96-column cards.

Bo Mortil, CDP

Port Coquitlam, B.C.